

COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

Permit No. **VA0062685**Effective Date: October 1, 2014
Expiration Date: September 30, 2019

AUTHORIZATION TO DISCHARGE UNDER THE VIRGINIA POLLUTANT DISCHARGE ELIMINATION SYSTEM AND THE VIRGINIA STATE WATER CONTROL LAW

In compliance with the provisions of the Clean Water Act as amended and pursuant to the State Water Control Law and regulations adopted pursuant thereto, the following owner is authorized to discharge in accordance with the information submitted with the permit application, and with this permit cover page, and Parts I, II and III of this permit, as set forth herein.

Owner Name: Pepper's Ferry Regional Wastewater Treatment Authority

Facility Name: Pepper's Ferry Regional Wastewater Treatment Authority WWTP

County: Pulaski

Facility Location: 7797 Mason Street, Radford, VA 24141

The owner is authorized to discharge to the following receiving stream.

Stream: New River

River Basin: New River River Subbasin: N/A

Section: 2a Class: IV

Special Standards: PWS, v

Robert J. Weld

Regional Director, Blue Ridge Regional Office

9/30/2014 Date

A. LIMITATIONS AND MONITORING REQUIREMENTS

1. During the period beginning with the permit's effective date and lasting until the permit's expiration date, the permittee is authorized to discharge from Outfall 001. This discharge shall be limited and monitored as specified below:

		DISCHARGE LIMITA	TIONS		MONITORING RE	QUIREMENTS
Effluent Characteristic	Monthly Average	Weekly Average	Minimum	<u>Maximum</u>	Frequency	Sample Type
Flow ¹	NL (MGD)	NA	NA	NL (MGD)	Continuous	TIRE
рН	NA	NA	6.0 SU	9.0 SU	1/day	Grab
Biochemical Oxygen Demand ₅ ²	30 mg/L; 1022 kg/day	45 mg/L; 1533 kg/day	NA	NA	1/day	24 HC
Total Suspended Solids ²	30 mg/L; 1022 kg/day	45 mg/L; 1533 kg/day	NA	NA	1/day	24 HC
Dissolved Oxygen	NA	NA	6.0 mg/L	NA	1/day	Grab
E. coli	126 CFU/100 ml (geometric mean)	NA	NA	NA	1/day (10 am – 4 pm)	Grab
Toxicity ³	NA	NA	NA	NL (TU _c)	1/year ³	24 HC
NL = No Limitation with monitoring	g required $NA = Not$	Applicable TIRE = to	otalizing indicating	g recording equipmen	nt 24 HC = 24-h	our composite

- 1. The design flow capacity of this facility is **9.0 MGD**. See Part I.B.1 for additional flow reporting requirements.
- 2. See Part I.B.10 for analytical quantification levels and reporting requirements.
- 3. See Part I.D.1 for toxicity monitoring and reporting requirements.
- a. There shall be no discharge of floating solids or visible foam in other than trace amounts.
- b. At least 85% removal (monthly average) for BOD and TSS must be attained for this effluent.

2. During the period beginning with the issuance of a Certificate to Operate for an 18.0 MGD facility and lasting until the permit's expiration date, the permittee is authorized to discharge from Outfall 001. This discharge shall be limited and monitored as specified below:

		DISCHARGE LIMITATIO	<u>ONS</u>	<u>M</u>	ONITORING REQU	<u>UIREMENTS</u>
Effluent Characteristic	Monthly Average	Weekly Average	<u>Minimum</u>	<u>Maximum</u>	Frequency	Sample Type
Flow ¹	NL (MGD)	NA	NA	NL (MGD)	Continuous	TIRE
pH	NA	NA	6.0 SU	9.0 SU	1/day	Grab
Biochemical Oxygen Demand ₅ ²	30 mg/L; 2044 kg/day	45 mg/L; 3066 kg/day	NA	NA	1/day	24 HC
Total Suspended Solids ²	30 mg/L; 2044 kg/day	45 mg/L; 3066 kg/day	NA	NA	1/day	24 HC
Dissolved Oxygen	NA	NA	6.0 mg/L	NA	1/day	Grab
E. coli	126 CFU/100 ml (geometric mean)	NA	NA	NA	1/day (10 am – 4 pm)	Grab
Ammonia-N Jun-Dec ²	10 mg/L	12 mg/L	NA	NA	1/day	24 HC
Toxicity ³	NA	NA	NA	NL (TU _c)	3	24 HC
NL = No Limitation with monitoring	NL = No Limitation with monitoring required NA = Not Applicable TIRE = totalizing indicating recording equipment 24 HC = 24-hour composite					

- 1. The design flow capacity of this facility is **18.0 MGD**. See Part I.B.1 for additional flow reporting requirements.
- 2. See Part I.B.10 for analytical quantification levels and reporting requirements.
- 3. See Part I.D.2 for toxicity monitoring and reporting requirements.
- a. There shall be no discharge of floating solids or visible foam in other than trace amounts.
- b. At least 85% removal (monthly average) for BOD and TSS must be attained for this effluent.

B. OTHER REQUIREMENTS OR SPECIAL CONDITIONS

- 1. **95% Capacity Reopener** A written notice and a plan of action for ensuring continued compliance with the terms of this permit shall be submitted to DEQ's Blue Ridge Regional Office when the monthly average flow influent to the sewage treatment plant reaches 95 percent of the design capacity authorized in this permit for each month of any three consecutive month period. The written notice shall be submitted within 30 days and the plan of action shall be received at DEQ's Blue Ridge Regional Office no later than 90 days from the third consecutive month for which the flow reached 95 percent of the design capacity. The plan shall include the necessary steps and a prompt schedule of implementation for controlling any current or reasonably anticipated problem resulting from high influent flows. Failure to submit an adequate plan in a timely manner shall be deemed a violation of the permit.
- 2. **Indirect Dischargers** The permittee shall provide adequate notice to the Department of the following:
 - a. Any new introduction of pollutants into the treatment works from an indirect discharger which would be subject to Section 301 or 306 of the Clean Water Act and the State Water Control Law if it were directly discharging those pollutants; and
 - b. Any substantial change in the volume or character of pollutants being introduced into the treatment works by a source introducing pollutants into the treatment works at the time of issuance of this permit. Adequate notice shall include information on (i) the quality and quantity of effluent introduced into the treatment works, and (ii) any anticipated impact of the change on the quantity or quality of effluent to be discharged from the treatment works.
- 3. **CTC, CTO Requirement** The permittee shall, in accordance with the DEQ Sewage Collection and Treatment Regulation (9VAC25-790), obtain a Certificate to Construct (CTC) and a Certificate to Operate (CTO) from the DEQ Office of Wastewater Engineering (for Water Quality Improvement Funded (WQIF) projects) or submitted by the design engineer and owner to the DEQ regional water permit manager (for non-WQIF projects) prior to constructing wastewater treatment works and operating the treatment works, respectively. Non-compliance with the CTC or CTO shall be deemed a violation of the permit.
- 4. **Operations and Maintenance Manual Requirement** The permittee shall maintain a current Operations and Maintenance (O&M) Manual for the treatment works that is in accordance with Virginia Pollutant Discharge Elimination System Regulations, 9VAC25-31 and (for sewage treatment plants) Sewage Collection and Treatment Regulations, 9VAC25-790.

The O&M Manual and subsequent revisions shall include the manual effective date and meet Part II.K.2 and Part II.K.4 Signatory Requirements of the permit. Any changes in the practices and procedures followed by the permittee shall be documented in the O&M Manual within 90 days of the effective date of the changes. The permittee shall operate the treatment works in accordance with the O&M Manual and shall make the O&M Manual available to Department personnel for review during facility inspections. Within 30 days of a request by DEQ, the current O&M Manual shall be submitted to DEQ's Blue Ridge Regional Office for review and approval.

The O&M Manual shall detail the practices and procedures which will be followed to ensure compliance with the requirements of this permit. This manual shall include, but not necessarily be limited to, the following items, as appropriate:

B. OTHER REQUIREMENTS OR SPECIAL CONDITIONS (continued)

- a. Permitted outfall locations and techniques to be employed in the collection, preservation, and analysis of effluent, storm water and sludge samples;
- b. Procedures for measuring and recording the duration and volume of treated wastewater discharged;
- c. Discussion of Best Management Practices, if applicable;
- d. Procedures for handling, storing, and disposing of all wastes, fluids, and pollutants that will prevent these materials from reaching state waters. List type and quantity of wastes, fluids, and pollutants (e.g. chemicals) stored at this facility.
- e. Discussion of treatment works design, treatment works operation, routine preventative maintenance of units within the treatment works, critical spare parts inventory and record keeping;
- f. Plan for the management and/or disposal of waste solids and residues;
- g. Hours of operation and staffing requirements for the plant to ensure effective operation of the treatment works and maintain permit compliance;
- h. List of facility, local and state emergency contacts; procedures for reporting and responding to any spills/overflows/treatment works upsets.
- 5. Licensed Operator Requirement The permittee shall employ or contract at least one Class I licensed wastewater works operator for this facility. The license shall be issued in accordance with Title 54.1 of the Code of Virginia and the Board for Waterworks and Wastewater Works Operators and Onsite Sewage System Professionals Regulations. The permittee shall notify the Department in writing whenever he is not complying, or has grounds for anticipating he will not comply with this requirement. The notification shall include a statement of reasons and a prompt schedule for achieving compliance.
- 6. **Reliability Class** The permitted treatment works shall meet Reliability Class I.
- 7. **Sludge Use and Disposal** The permittee shall conduct all sewage sludge use or disposal activities in accordance with the Sludge Management Plan (SMP) approved with the issuance of this permit. Any proposed changes in the sewage sludge use or disposal practices or procedures followed by the permittee shall be documented and submitted for DEQ approval 90 days prior to the effective date of the changes. Upon approval, the revised SMP becomes an enforceable part of the permit. The permit may be modified or alternatively revoked and reissued to incorporate limitations or conditions necessitated by substantive changes in sewage sludge use or disposal practices.
- 8. **Sludge Reopener** The Board may promptly modify or revoke and reissue this permit if an applicable standard for sewage sludge use or disposal promulgated under Section 405(d) of the Clean Water Act is more stringent than any requirements for sludge use or disposal in this permit, or controls a pollutant or practice not limited in this permit.
- 9. **Total Maximum Daily Load (TMDL) Reopener** This permit shall be modified alternatively revoked and reissued if any approved wasteload allocation procedure, pursuant to Section 303(d) of the Clean Water Act, imposes wasteload allocations, limits or conditions on the facility that are not consistent with the permit requirements.

10. Compliance Reporting

a. The quantification levels (QL) shall be less than or equal to the following concentrations.

 $\begin{tabular}{lll} \hline Effluent Parameter & Quantification Level \\ \hline Biochemical Oxygen Demand_5 & 2 mg/L \\ \hline Total Suspended Solids & 1.0 mg/L \\ \hline Ammonia-N & 0.20 mg/L \\ \hline \end{tabular}$

B. OTHER REQUIREMENTS OR SPECIAL CONDITIONS (continued)

The QL is defined as the lowest concentration used to calibrate a measurement system in accordance with the procedures published for the method. It is the responsibility of the permittee to ensure that proper quality assurance/quality control (QA/AC) protocols are followed during the sampling and analytical procedures. QA/QC information shall be documented to confirm that appropriate analytical procedures have been used and the required QL have been attained. The permittee shall use any method in accordance with Part II.A of this permit.

b. Monthly Average — Compliance with the monthly average limitations and/or reporting requirements for the parameters listed in subsection a. of this permit condition shall be determined as follows: All concentration data below the QL used for the analysis (QL must be less than or equal to the QL listed in a. above) shall be treated as zero. All concentration data equal to or above the QL used for the analysis shall be treated as it is reported. An arithmetic average shall be calculated using all reported data for the month, included the defined zeros. This arithmetic average shall be reported on the Discharge Monitoring Report (DMR) as calculated. If all data are below the QL used for the analysis, then the average shall be reported as "<QL". If reporting for quantity is required on the DMR and the reported monthly average concentration is <QL, then report "<QL" for the quantity. Otherwise use the reported concentration data (including the defined zeros) and flow data for each sample day to determine the daily quantity and report the monthly average of the calculated daily quantities.

Weekly Average — Compliance with the weekly average limitations and/or reporting requirements for the parameters listed in subsection a. of this permit condition shall be determined as follows: All concentration data below the QL used for the analysis (QL must be less than or equal to the QL listed in a. above) shall be treated as zero. All concentration data equal to or above the QL used for the analysis shall be treated as reported. An arithmetic average shall be calculated using all reported data, including the defined zeros, collected within each complete calendar week and entirely contained within the reporting month. The maximum value of the weekly averages thus determined shall be reported on the DMR. If all data are below the QL used for the analysis, then the weekly average shall be reported as "<QL". If reporting for quantity is required on the DMR and the reported weekly average concentration is <QL, then report "<QL" for the quantity. Otherwise use the reported concentration data (including the defined zeros) and flow data for each sample day to determine the daily quantity and report the maximum weekly average of the calculated daily quantities.

<u>Daily Maximum</u> — Compliance with the daily maximum limitations and/or reporting requirements for the parameters listed in subsection a. of this permit condition shall be determined as follows: All concentration data below the QL used for the analysis (QL must be less than or equal to the QL listed in a. above) shall be treated as zero. All concentration data equal to or above the QL used for the analysis shall be treated as reported. An arithmetic average shall be calculated using all reported data, including the defined zeros, collected within each day during the reporting month. The maximum value of these daily averages thus determined shall be reported on the DMR as the Daily Maximum. If all data are below the QL used for the analysis, then the maximum value of the daily averages shall be reported as "<QL". If reporting for quantity is required on the DMR and the reported daily maximum concentration is <QL, then report "<QL" for the quantity. Otherwise use the reported daily average concentrations (including the defined zeros) and corresponding daily flows to determine daily average quantities and report the maximum of the daily average quantities during the reporting month.

- <u>Single Datum</u>—Any single datum required shall be reported as "<QL" if it is less than the QL used for the analysis (QL must be less than or equal to the QL listed in a. above). Otherwise the numerical value shall be reported.
- c. <u>Significant Digits</u> —The permittee shall report at least the same number of significant digits as the permit limit for a given parameter. Regardless of the rounding convention used by the permittee (i.e., 5 always rounding up or to the nearest even number), the permittee shall use the convention consistently, and shall ensure that the consulting laboratories employed by the permittee use the same convention.

C. PRETREATMENT

The permittee's pretreatment program has been approved. The program is an enforceable part of this permit. The permittee shall:

- 1. Implement a pretreatment program that complies with the Clean Water Act, Water Control Law, State regulations and the approved program.
- 2. Submit to DEQ's Blue Ridge Regional Office an annual report that describes the permittee's program activities over the previous year. The annual report shall be submitted no later than **January 31** of each year and shall include:
 - a. An updated list of the Significant Industrial Users* noting all of the following:
 - (1) facility address, phone and contact name;
 - (2) explanation of SIUs deleted from the previous year's list;
 - (3) identify which IUs are subject to Categorical Standards and note which Standard (i.e. metal finishing);
 - (4) specify which 40 CFR part(s) is/are applicable;
 - (5) indicate which IUs are subject to local standards that are more stringent than Categorical Pretreatment Standards;
 - (6) indicate which IUs are subject only to local requirements;
 - (7) identify which IUs are subject to Categorical Pretreatment Standards that are subject to reduced reporting requirements under 9VAC25-31-840 E.3;
 - (8) identify which IUs are non-significant Categorical Industrial Users. showing the categorical standards and local limits applicable to each.
 - b. A summary of the compliance status of each Significant Industrial User with pretreatment standards and permit requirements.
 - c. A summary of the numbers and types of Significant Industrial User sampling and inspections performed by the POTW.
 - d. All information concerning any interference, upset, VPDES permit or Water Quality Standards violations directly attributable to Significant Industrial Users and the enforcement actions taken to alleviate said events.
 - e. A description of all enforcement actions taken against Significant Industrial Users over the previous 12 months.
 - f. A summary of any changes to the submitted pretreatment program that have not been previously reported to DEQ's Blue Ridge Regional Office.
 - g. A summary of the permits issued to Significant Industrial Users since the last annual report.
 - h. POTW and self-monitoring results for Significant Industrial Users determined to be in significant non-compliance during the reporting period.
 - i. Results of the POTW's influent/effluent/sludge sampling, not previously submitted to DEQ.
 - j. Copies of newspaper publications of all Significant Industrial Users in significant non-compliance during the reporting period. This is due no later than **March 31** of each year.
 - k. Signature of an authorized representative.
- 3. Submit any changes to the approved pretreatment program to DEQ's Blue Ridge Regional Office and obtain approval before implementation of the changes.
- 4. Ensure all Significant Industrial Users' permits are issued and reissued in a timely manner and that Significant Industrial User permits issued by the POTW are effective and enforceable.

C. PRETREATMENT (continued)

- 5. Inspect and sample all Significant Industrial Users at a minimum of once a year:
 - a. Sampling shall include all regulated parameters, and shall be representative of the wastewater discharged;
 - b. Inspection of the Significant Industrial Users shall cover all areas which could result in wastewater discharge to the treatment works including manufacturing, chemical storage, pretreatment facilities, spill prevention and control procedures, hazardous waste generation, and Significant Industrial User's self-monitoring and records.
- 6. Implement the reporting requirements of Part VII of the VPDES Permit Regulation.
- 7. Review the Enforcement Response Plan (ERP) and ensure it meets state and federal regulatory requirements. The approved ERP is an enforceable part of this permit and shall be implemented.
- 8. Develop local limits or reevaluate local limits using current influent, effluent, and sludge monitoring data and submit the data and results of the evaluation to DEQ's Blue Ridge Regional Office within one year of the effective or modification date. All Significant Industrial Users shall be sampled at the end of any categorical processes and at the entrance to the treatment works.
- 9. Ensure that adequate resources are available to implement the approved program.
- 10. Meet all public participation requirements and annually public notice Significant Industrial Users in significant non-compliance with pretreatment standards and requirements for the previous 12 months.
- 11. Within 180 days of the effective or modification date of this permit, submit to DEQ's Blue Ridge Regional Office a survey of all Industrial Users discharging to the POTW. The information shall be submitted to the POTW on the DEQ's Discharger Survey Form or an equivalent form that includes the quantity and quality of the wastewater. Survey results shall include the identification of significant industrial users of the POTW.
- 12. In lieu of the survey, the permittee may elect to develop, submit for approval, and implement the plan to continuously survey the industrial community in their jurisdiction.
- 13. The DEQ may require the POTW to institute changes to its pretreatment program:
 - a. If the approved program is not implemented in a way satisfying the requirements of the Clean Water Act, Water Control Law or State Regulations;
 - b. If problems such as pass-through, interference, water quality standards violations, or sludge contamination develop or continue; and
 - c. If federal, state, or local requirements change.

* A Significant Industrial User is one that:

- Has an average flow of 25,000 gallons or more per average day of process** wastewater;
- Contributes a process wastestream that makes up 5.0 percent or more of the average dry weather hydraulic or organic capacity of the POTW;
- Is subject to the categorical pretreatment standards; or
- Has significant impact, either singularly or in combination with other Significant Dischargers, on the treatment works or the quality of its effluent.
- ** Excludes sanitary, non-contact cooling water and boiler blowdown.

D. WHOLE EFFLUENT TOXICITY PROGRAM

1. Whole Effluent Toxicity Monitoring for 9.0 MGD Operation

a. In accordance with the schedule in 1.d. below, the permittee shall conduct chronic toxicity tests for the duration of the permit or until the facility expands. Sampling shall be representative of the discharge of wastewater. The permittee should collect 24-hour flow-proportioned composite samples of final effluent from Outfall 001. The chronic tests to use are:

Chronic 3-Brood Static Renewal Survival and Reproduction Test using Ceriodaphnia dubia;

Chronic 7-Day Static Renewal Survival and Growth Test using *Pimephales promelas*. These chronic tests shall be conducted in such a manner and at sufficient dilutions (minimum of five dilutions, derived geometrically) to determine the "No Observed Effect Concentration" (NOEC) for survival and reproduction or growth. Tests producing a NOEC less than the lowest dilution tested are not acceptable and must be repeated. Express the test NOEC as TUc (Chronic Toxic Units), by dividing 100/NOEC for reporting. Report the LC50 at 48 hours and the IC25 with the NOECs in the test report. The permittee may provide additional samples to address data variability during the period of initial data generation. These data shall be reported and may be included in the evaluation of effluent toxicity. Test procedures and reporting shall be in accordance with the WET testing methods cited in 40 CFR 136.3.

- b. The test dilutions should be able to determine compliance with the following endpoint:
 - Chronic NOEC greater than or equal to 15% equivalent to a TUc of less than or equal to 6.66.
- c. The test data may be evaluated for reasonable potential at the conclusion of the test period. The data may be evaluated sooner if requested by the permittee, or if toxicity has been noted. Should evaluation of the data indicate that a limit is needed, a WET limit and compliance schedule will be required and the toxicity tests in 1.a. may be discontinued.
- d. Reporting Schedule The permittee shall report the results on the DMR and supply one copy of the toxicity test reports specified in this Whole Effluent Toxicity Program in accordance with the schedule below. Reports shall be submitted on the DMR by the 10th of the month following receipt of reports from the contract laboratory and no later than shown below. Sampling and testing should be conducted early in each compliance period in case retesting is needed for unacceptable tests. A retest of a non-acceptable test must be performed during the same compliance period as the test it is replacing.

Period ID	Compliance Period	DMR/Report Submission Date
1 st Annual	10/1/14 — 9/30/15	by 10/10/15
2 nd Annual	10/1/15 — 9/30/16	by 10/10/16
3 rd Annual	10/1/16 — 9/30/17	by 10/10/17
4 th Annual	10/1/17 — 9/30/18	by 10/10/18
5 th Annual	10/1/18 — 9/30/19	by 10/10/19

D. WHOLE EFFLUENT TOXICITY PROGRAM (continued)

2. Whole Effluent Toxicity Monitoring for 18.0 MGD Operation

a. In accordance with the schedule in 2.d. below, the permittee shall conduct chronic toxicity tests within 6 months of receipt of a Certificate to Operate (CTO) for an 18.0 MGD facility for the duration of the permit. Sampling shall be representative of the discharge of wastewater. The permittee should collect 24-hour flow-proportioned composite samples of final effluent from Outfall 001. The chronic tests to use are:

Chronic 3-Brood Static Renewal Survival and Reproduction Test using Ceriodaphnia dubia;

Chronic 7-Day Static Renewal Survival and Growth Test using *Pimephales promelas*. These chronic tests shall be conducted in such a manner and at sufficient dilutions (minimum of five dilutions, derived geometrically) to determine the "No Observed Effect Concentration" (NOEC) for survival and reproduction or growth. Tests producing a NOEC less than the lowest dilution tested are not acceptable and must be repeated. Express the test NOEC as TUc (Chronic Toxic Units), by dividing 100/NOEC for reporting. Report the LC50 at 48 hours and the IC25 with the NOECs in the test report. The permittee may provide additional samples to address data variability during the period of initial data generation. These data shall be reported and may be included in the evaluation of effluent toxicity. Test procedures and reporting shall be in accordance with the WET testing methods cited in 40 CFR 136.3.

- b. The test dilutions should be able to determine compliance with the following endpoint: Chronic NOEC greater than or equal to 21% equivalent to a TUc of less than or equal to 4.76.
- c. The test data may be evaluated for reasonable potential at the conclusion of the test period. The data may be evaluated sooner if requested by the permittee, or if toxicity has been noted. Should evaluation of the data indicate that a limit is needed, a WET limit and compliance schedule will be required and the toxicity tests in 2.a. may be discontinued.
- d. Reporting Schedule The permittee shall report the results on the DMR and supply one copy of the toxicity test reports specified in this Whole Effluent Toxicity Program. Testing and reporting shall be for up to ten calendar quarters and any following twelve-month periods for the duration of the permit. The initial quarter will be a complete calendar quarter within the first six months of receipt of a CTO for an 18.0 MGD facility. Calendar quarters are defined as January-March, April-June, July-September, and October-December. Reports shall be submitted on the DMR by the 10th of the month following receipt of reports from the contract laboratory. Sampling and testing should be conducted early in each compliance period (calendar quarter or twelve-month period) in case retesting is needed for unacceptable tests. A retest of a non-acceptable test must be performed during the same compliance period as the test it is replacing.

CONDITIONS APPLICABLE TO ALL VPDES PERMITS

A. Monitoring

- 1. Samples and measurements required by this permit shall be taken at the permit designated or approved location and be representative of the monitored activity.
 - a. Monitoring shall be conducted according to procedures approved under Title 40 Code of Federal Regulations Part 136 or alternative methods approved by the U.S. Environmental Protection Agency, unless other procedures have been specified in this permit.
 - b. The permittee shall periodically calibrate and perform maintenance procedures on all monitoring and analytical instrumentation at intervals that will insure accuracy of measurements.
 - c. Samples taken shall be analyzed in accordance with 1VAC30-45, Certification for Noncommercial Environmental Laboratories, or 1VAC30-46, Accreditation for Commercial Environmental Laboratories.
- 2. Any pollutant specifically addressed by this permit that is sampled or measured at the permit designated or approved location more frequently than required by this permit shall meet the requirements in A.1.a -c. above and the results of this monitoring shall be included in the calculations and reporting required by this permit.
- 3. Operational or process control samples or measurements shall not be taken at the designated permit sampling or measurement locations. Operational or process control samples or measurements do not need to follow procedures approved under Title 40 Code of Federal Regulations Part 136 or be analyzed in accordance with 1VAC30-45, Certification for Noncommercial Environmental Laboratories, or 1VAC30-46, Accreditation for Commercial Environmental Laboratories.

B. Records

- 1. Records of monitoring information shall include:
 - a. The date, exact place, and time of sampling or measurements;
 - b. The individual(s) who performed the sampling or measurements;
 - c. The date(s) and time(s) analyses were performed;
 - d. The individual(s) who performed the analyses;
 - e. The analytical techniques or methods used; and
 - f. The results of such analyses.
- 2. Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years, the permittee shall retain records of all monitoring information, including all calibration and maintenance records and all recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report or application. This period of retention shall be extended automatically during the course of any unresolved litigation regarding the regulated activity or regarding control standards applicable to the permittee, or as requested by the Board.

C. Reporting Monitoring Results

- 1. The permittee shall submit the results of the monitoring required by this permit not later than the 10th day of the month after monitoring takes place, unless another reporting schedule is specified elsewhere in this permit. Monitoring results shall be submitted to: Virginia Department of Environmental Quality; Blue Ridge Regional Office; 3019 Peters Creek Road; Roanoke, VA 24019
- 2. Monitoring results shall be reported on a Discharge Monitoring Report (DMR) or on forms provided, approved or specified by the Department.
- 3. Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this permit.

D. Duty to Provide Information

The permittee shall furnish to the Department, within a reasonable time, any information which the Board may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The Board may require the permittee to furnish, upon request, such plans, specifications, and other pertinent information as may be necessary to determine the effect of the wastes from his discharge on the quality of state waters, or such other information as may be necessary to accomplish the purposes of the State Water Control Law. The permittee shall also furnish to the Department upon request, copies of records required to be kept by this permit.

E. Compliance Schedule Reports

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

F. Unauthorized Discharges

Except in compliance with this permit, or another permit issued by the Board, it shall be unlawful for any person to:

- 1. Discharge into state waters sewage, industrial wastes, other wastes, or any noxious or deleterious substances; or
- 2. Otherwise alter the physical, chemical or biological properties of such state waters and make them detrimental to the public health, or to animal or aquatic life, or to the use of such waters for domestic or industrial consumption, or for recreation, or for other uses.

G. Reports of Unauthorized Discharges

Any permittee who discharges or causes or allows a discharge of sewage, industrial waste, other wastes or any noxious or deleterious substance into or upon state waters in violation of Part II.F; or who discharges or causes or allows a discharge that may reasonably be expected to enter state waters in violation of Part II.F, shall notify the Department of the discharge immediately upon discovery of the discharge, but in no case later than 24 hours after said discovery. A written report of the unauthorized discharge shall be submitted to the Department, within five days of discovery of the discharge. The written report shall contain:

- 1. A description of the nature and location of the discharge;
- 2. The cause of the discharge;
- 3. The date on which the discharge occurred;
- 4. The length of time that the discharge continued;
- 5. The volume of the discharge;
- 6. If the discharge is continuing, how long it is expected to continue;
- 7. If the discharge is continuing, what the expected total volume of the discharge will be; and
- 8. Any steps planned or taken to reduce, eliminate and prevent a recurrence of the present discharge or any future discharges not authorized by this permit.

Discharges reportable to the Department under the immediate reporting requirements of other regulations are exempted from this requirement.

H. Reports of Unusual or Extraordinary Discharges

If any unusual or extraordinary discharge including a bypass or upset should occur from a treatment works and the discharge enters or could be expected to enter state waters, the permittee shall promptly notify, in no case later than 24 hours, the Department by telephone after the discovery of the discharge. This notification shall provide all available details of the incident, including any adverse affects on aquatic life and the known number of fish killed. The permittee shall reduce the report to writing and shall submit it to the Department within five days of discovery of the discharge in accordance with Part II.I.2. Unusual and extraordinary discharges include but are not limited to any discharge resulting from:

H. Reports of Unusual or Extraordinary Discharges (continued)

- 1. Unusual spillage of materials resulting directly or indirectly from processing operations;
- 2. Breakdown of processing or accessory equipment;
- 3. Failure or taking out of service some or all of the treatment works; and
- 4. Flooding or other acts of nature.

I. Reports of Noncompliance

The permittee shall report any noncompliance which may adversely affect state waters or may endanger public health.

- 1. An oral report shall be provided within 24 hours from the time the permittee becomes aware of the circumstances. The following shall be included as information which shall be reported within 24 hours under this paragraph:
 - a. Any unanticipated bypass; and
 - b. Any upset which causes a discharge to surface waters.
- 2. A written report shall be submitted within 5 days and shall contain:
 - a. A description of the noncompliance and its cause;
 - b. The period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and
 - c. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.
 - The Board may waive the written report on a case-by-case basis for reports of noncompliance under Part II.I if the oral report has been received within 24 hours and no adverse impact on state waters has been reported.
- 3. The permittee shall report all instances of noncompliance not reported under Parts II.I.1 or 2, in writing, at the time the next monitoring reports are submitted. The reports shall contain the information listed in Part II.I.2.

NOTE: The immediate (within 24 hours) reports required in Parts II.G, H and I may be made to the Department's Regional Office at (540) 562-6700 (voice), (540) 562-6725 (fax), or online at http://www.deq.virginia.gov/Programs/PollutionResponsePreparedness/MakingaReport.aspx. For reports outside normal working hours, leave a message and this shall fulfill the immediate reporting requirement. For emergencies, the Virginia Department of Emergency Services maintains a 24-hour telephone service at 1-800-468-8892.

J. Notice of Planned Changes

- 1. The permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:
 - a. The permittee plans alteration or addition to any building, structure, facility, or installation from which there is or may be a discharge of pollutants, the construction of which commenced:
 - (1) After promulgation of standards of performance under Section 306 of Clean Water Act which are applicable to such source; or
 - (2) After proposal of standards of performance in accordance with Section 306 of Clean Water Act which are applicable to such source, but only if the standards are promulgated in accordance with Section 306 within 120 days of their proposal;
 - b. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations nor to notification requirements specified elsewhere in this permit; or
 - c. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.
 - 2. The permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

K. Signatory Requirements

- 1. Applications. All permit applications shall be signed as follows:
 - a. For a corporation: by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (i) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;
 - b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or
 - c. For a municipality, state, federal, or other public agency: By either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a public agency includes: (i) The chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.
- 2. Reports, etc. All reports required by permits, and other information requested by the Board shall be signed by a person described in Part II.K.1, or by a duly authorized representative of that person. A person is a duly authorized representative only if:
 - a. The authorization is made in writing by a person described in Part II.K.1;
 - b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.); and
 - c. The written authorization is submitted to the Department.
- 3. Changes to authorization. If an authorization under Part II.K.2 is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Part II.K.2 shall be submitted to the Department prior to or together with any reports, or information to be signed by an authorized representative.
- 4. Certification. Any person signing a document under Parts II.K.1 or 2 shall make the following certification: "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

L. Duty to Comply

The permittee shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the State Water Control Law and the Clean Water Act, except that noncompliance with certain provisions of this permit may constitute a violation of the State Water Control Law but not the Clean Water Act. Permit noncompliance is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

The permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under Section 405(d) of the Clean Water Act within the time provided in the regulations that establish these standards or

L. Duty to Comply (continued)

prohibitions or standards for sewage sludge use or disposal, even if this permit has not yet been modified to incorporate the requirement.

M. Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee shall apply for and obtain a new permit. All permittees with a currently effective permit shall submit a new application at least 180 days before the expiration date of the existing permit, unless permission for a later date has been granted by the Board. The Board shall not grant permission for applications to be submitted later than the expiration date of the existing permit.

N. Effect of a Permit

This permit does not convey any property rights in either real or personal property or any exclusive privileges, nor does it authorize any injury to private property or invasion of personal rights, or any infringement of federal, state or local law or regulations.

O. State Law

Nothing in this permit shall be construed to preclude the institution of any legal action under, or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any other state law or regulation or under authority preserved by Section 510 of the Clean Water Act. Except as provided in permit conditions on "bypassing" (Part II.U), and "upset" (Part II.V) nothing in this permit shall be construed to relieve the permittee from civil and criminal penalties for noncompliance.

P. Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Sections 62.1-44.34:14 through 62.1-44.34:23 of the State Water Control Law.

Q. Proper Operation and Maintenance

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes effective plant performance, adequate funding, adequate staffing, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by the permittee only when the operation is necessary to achieve compliance with the conditions of this permit.

R. Disposal of Solids or Sludges

Solids, sludges or other pollutants removed in the course of treatment or management of pollutants shall be disposed of in a manner so as to prevent any pollutant from such materials from entering state waters.

S. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

T. Need to Halt or Reduce Activity not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

U. Bypass

1. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of Parts II.U.2 and U.3.

2. Notice

- a. Anticipated bypass. If the permittee knows in advance of the need for a bypass, prior notice shall be submitted, if possible at least ten days before the date of the bypass.
- b. Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in Part II.I.
- 3. Prohibition of bypass.
 - a. Bypass is prohibited, and the Board may take enforcement action against a permittee for bypass, unless:
 - (1) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
 - (2) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
 - (3) The permittee submitted notices as required under Part II.U.2.
 - b. The Board may approve an anticipated bypass, after considering its adverse effects, if the Board determines that it will meet the three conditions listed above in Part II.U.3.a.

V. Upset

- 1. An upset constitutes an affirmative defense to an action brought for noncompliance with technology based permit effluent limitations if the requirements of Part II.V.2 are met. A determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is not a final administrative action subject to judicial review.
- 2. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - a. An upset occurred and that the permittee can identify the cause(s) of the upset;
 - b. The permitted facility was at the time being properly operated;
 - c. The permittee submitted notice of the upset as required in Part II.I; and
 - d. The permittee complied with any remedial measures required under Part II.S.
- 3. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

W. Inspection and Entry

The permittee shall allow the Director, or an authorized representative, upon presentation of credentials and other documents as may be required by law, to:

- 1. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
- 2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- 3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
- 4. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act and the State Water Control Law, any substances or parameters at any location.

For purposes of this section, the time for inspection shall be deemed reasonable during regular business hours, and whenever the facility is discharging. Nothing contained herein shall make an inspection unreasonable during an emergency.

X. Permit Actions

Permits may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

Y. Transfer of permits

- Permits are not transferable to any person except after notice to the Department. Except as provided in Part II.Y.2, a permit may be transferred by the permittee to a new owner or operator only if the permit has been modified or revoked and reissued, or a minor modification made, to identify the new permittee and incorporate such other requirements as may be necessary under the State Water Control Law and the Clean Water Act.
- 2. As an alternative to transfers under Part II.Y.1, this permit may be automatically transferred to a new permittee if:
 - a. The current permittee notifies the Department at least 30 days in advance of the proposed transfer of the title to the facility or property;
 - b. The notice includes a written agreement between the existing and new permittees containing a specific date for transfer of permit responsibility, coverage, and liability between them; and
 - c. The Board does not notify the existing permittee and the proposed new permittee of its intent to modify or revoke and reissue the permit. If this notice is not received, the transfer is effective on the date specified in the agreement mentioned in Part II.Y.2.b.

Z. Severability

The provisions of this permit are severable, and if any provision of this permit or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

During the period beginning with the permit's effective date and lasting until the permit's expiration date, and in accordance with 9VAC25-31-420 – 720, 9VAC25-32-303 *et seq.*, and the limitations, conditions and requirements set forth in this permit, the permittee is authorized to land apply biosolids and manage the pollutants in the biosolids land applied under the authority of this permit.

All biosolids samples shall be collected and analyzed in accordance with Title 40 of the Code of Federal Regulations, Parts 503 and 136. Analyses shall be conducted by a VELAP accredited environmental laboratory. The permittee shall ensure that all biosolids land applied in Virginia through this permit are monitored in accordance with the monitoring requirements in Part III.A.

A. LIMITATIONS AND MONITORING REQUIREMENTS

1. Class B Biosolids Annual Production Monitoring

- a. The permittee shall report on DMR SP1 the annual total amount of biosolids produced (in dry metric tons) and annual amount of biosolids (in dry metric tons) distributed for land application.
- b. Metals Limitations Pollutants in biosolids that are land applied under the authority of this permit shall be monitored and limited as specified below and reported on DMR SO1. Biosolids shall not be applied to the land if the concentration of any pollutant in the biosolids exceeds the ceiling limitation of that pollutant.

	PC / CPLR LIMITATIONS	CEILING LIMITATIONS	MONITORING REQUIREMENTS	
PARAMETERS (1)	Monthly Average (mg/kg) (2)	Maximum (mg/kg) (2)	Frequency	Sample Type
Arsenic	41	75	once per quarter	Composite
Cadmium	39	85	once per quarter	Composite
Copper	1,500	4,300	once per quarter	Composite
Lead	300	840	once per quarter	Composite
Mercury	17	57	once per quarter	Composite
Molybdenum	NL ⁽³⁾	75	once per quarter	Composite
Nickel	420	420	once per quarter	Composite
Selenium	100	100	once per quarter	Composite
Zinc	2,800	7,500	once per quarter	Composite

NL = no limitations, monitor and report

- (1) All constituents are subject to cumulative pollutant loading rates (CPLR), pollutant concentrations (PC), and ceiling limits. PC biosolids contain the constituents identified above at concentrations below the monthly average specified in Part III.A.1.b. CPLR biosolids contain the constituents identified above at concentrations above the monthly average and each sample must be below the maximum concentration specified in Part III.A.1.b. If the concentration of any of these constituents in biosolids from any source exceeds the monthly average concentration, then the biosolids from the source are subject to CPLR rules (Part III.A.1.c and Part III.I.16.)
- (2) All limits and criteria are expressed on a dry weight basis.
- (3) The monthly average concentration for molybdenum is currently under study by USEPA. Research suggests that a monthly average molybdenum concentration below 40 mg/kg may be appropriate to reduce the risk of copper deficiency in grazing animals

c. Site Specific Metals Loading Limitations — If the concentration of any of these constituents in biosolids from any source exceeds the monthly average PC in Part III.A.1.b, and each individual sample is below the ceiling concentration, then the biosolids from the source are subject to CPLR rules and tracking (Part III.I.16) and the cumulative pollutant loading at each site shall be limited by the permittee as specified below:

	LIMIT	ATIONS		•
	Maximu	n CPLR (1)	MONITORING	REQUIREMENTS
PARAMETERS	(kg/ha) (2)(3)	(Lbs/Ac) (2)(3)	Frequency	Sample Type
Arsenic	41	36	each application	Calculated
Cadmium	39	35	each application	Calculated
Copper	1,500	1,340	each application	Calculated
Lead	300	270	each application	Calculated
Mercury	17	16	each application	Calculated
Molybdenum	NL ⁽⁴⁾	NL	each application	Calculated
Nickel	420	375	each application	Calculated
Selenium	100	89	each application	Calculated
Zinc	2,800	2,500	each application	Calculated

NL = no limitations, monitor and report

- (1) The CPLR is the maximum cumulative application of trace elements that can be applied to soils used for crop production. The maximum cumulative application rate is limited for all ranges of cation exchange capacity due to soil background pH in Virginia of less than 6.5 S.U. and lack of regulatory controls of soil pH adjustment after biosolids application ceases.
- (2) All limits and criteria are expressed on a dry weight basis.
- (3) No person shall apply bulk biosolids subject to the CPLRs identified above to agricultural land, forest, a public contact site, or a reclamation site if any of the CPLRs identified above has been reached.
- (4) The maximum cumulative application for molybdenum is currently under study by USEPA. Research suggests that for molybdenum a cumulative pollutant loading rate below 40 kg/hectare may be appropriate to reduce the risk of copper deficiency in grazing animals.

d. Pathogen Reduction Requirements — Biosolids land applied under this permit shall be treated to meet at least one Class B Pathogen Reduction Alternative as identified in the table below prior to delivery to the land application site. The biosolids shall be monitored and limited in accordance with the treatment options selected and used by the generator. The permittee will have a system in place to verify that all biosolids land applied under this permit meet these pathogen reduction standards and treatment requirements.

PATHOGEN REDUCTION ALTERNATIVE	PROCESS TO SIGNIFICANTLY REDUCE PATHOGENS	CLASS B PATHOGEN REDUCTION TREATMENT & STANDARDS	MONITORING REQUIREMENTS
2	(PSRP) OPTION 3	PSRP: Anaerobic digestion for a mean cell residence time between 15 days at 35°C - 55°C up to 60 days at 20°C. (9VAC25-31-710 D.3)	(2)

NA = not applicable

- (1) Between sampling events, operating records must demonstrate that the wastewater treatment plant (WWTP) is operating at a performance level known to meet the pathogen reduction standards.
- (2) Process monitoring must be sufficient to demonstrate compliance with PSRP treatment requirements.
- e. Vector Attraction Reduction (VAR) Requirements Biosolids land applied under this permit shall be treated to meet at least one VAR Option 1 8 as identified in the table below prior to delivery to the land application site or VAR Options 9 or 10 must be performed at the land application site. The biosolids shall be monitored and limited in accordance with the treatment options selected and used by the generator. The permittee will have a system in place to verify that all biosolids land applied under this permit meet these VAR standards and treatment requirements.

VAR OPTION	VECTOR ATTRACTION REDUCTION TREATMENT STANDARDS	MONITORING REQUIREMENTS
1	38% Reduction of volatile solids by digestion (9VAC25-31-720 B.1)	once per quarter (1)
2	When 38% reduction is not achieved by anaerobic digestion, 40 day bench study at temperatures between 30°C and 37°C to demonstrate further reduction of volatile solids <17%. (9VAC25-31-720 B.2.)	once per quarter (1)

 $\overline{NA} = not applicable$

- (1) Between sampling events, operating records must demonstrate that the wastewater treatment plant (WWTP) is operating at a performance level known to meet the VAR standards.
- (2) Process monitoring must be sufficient to demonstrate compliance with VAR treatment requirements.

f. Biosolids Characteristics — Biosolids that are land applied under the authority of this permit shall be monitored and limited as specified below and reported on DMR SO1:

	LIMI	TATIONS	MONITORING R	EQUIREMENTS
PARAMETERS	Monthly Average	Minimum and Maximum	Frequency	Sample Type
Percent Solids (%)	NL	NA	once per quarter	Composite
Volatile Solids (%)	NL	NA	once per quarter	Composite
Total Kjeldahl Nitrogen (mg/kg) ⁽¹⁾	NL	NA	once per quarter	Composite
Ammonia Nitrogen (mg/kg) (1)	NL	NA	once per quarter	Composite
Nitrate Nitrogen (mg/kg) (1)	NL	NA	once per quarter	Composite
Total Phosphorus (mg/kg) (1)	NL	NA	once per quarter	Composite
Total Potassium (mg/kg) (1)	NL	NA	once per quarter	Composite
pH (S.U.)	NA	NL	once per quarter	Composite
Alkalinity as CaCO ₃ (mg/kg) (if lime by weight is less than 10%)	NL	NA	once per quarter	Composite
CCE as CaCO ₃ (%) (if lime by weight is 10% or more)	NL	NA	once per quarter	Composite

NL = no limitations, monitor and report; NA = not applicable

(1) Expressed on a dry weight basis.

g. Biosolids Nutrient Concentrations, Application Rates, and Loadings — Nutrient application rates and total 12 month field loadings shall be calculated and reported for each source of biosolids land applied and each application of biosolids to an application site as follows:

		LIMIT	ΓATIONS		MONITORIN	G REQUIREMENTS
PARAMETERS	Concentration (Lbs/Dry Ton)	Lbs/Ac Field Application Rate	12 Month Field Loading	NMP Application Rate	Frequency	Sample Type
Biosolids (Dry/Tons/Ac)	N/A	(1)	(1)	(1)	each application	Calculated
Plant Available Nitrogen	NL	(1)	(1)	(1)	each application	Calculated
Phosphate (P ₂ O ₅) (Lbs/Ac)	NL	(1)	(1)	(1)	each application	Calculated
K ₂ O (Lbs/Ac)	NL	(2)	(2)	(3)	(2,3)	Calculated
CaCO ₃ (Lbs/Ac)	NL	(4)	(4)	(5)	(4,5)	Calculated

NL = no limitations, monitor and report

- (1) The field application rate and 12 month field loading shall not exceed the application rate specified in the nutrient management plan (NMP) for the application method used.
- (2) Report the amount of K_2O provided by the biosolids and supplemental K_2O applied for each application where the soil test K is < 38 ppm Mehlich I.
- (3) Report the K_2O application rate recommended in the NMP for each application where the soil test K is < 38 ppm Mehlich I.
- (4) Report the amount of CaCO₃ provided by the biosolids and supplemental CaCO₃ applied for each application where the soil test pH is < 5.5 S.U.
- (5) Report the CaCO₃ application rate recommended in the NMP for each application where the soil test pH is < 5.5 S.U.

h. Frequency of Monitoring — The frequency of monitoring for each biosolids source is based on the amount of bulk biosolids from that source applied to the land in the previous calendar year, as indicated in the table below:

AMOUNT OF BIOSOLIDS L.			
dry tons	metric dry tons	Frequency	
Greater than zero but less than 320	Greater than zero but less than 290	Once per year	
Equal to or greater than 320 but less than 1,653	Equal to or greater than 290 but less than 1500	Four times per year (Once per quarter)	
Equal to or greater than 1,653 but less than	Equal to or greater than 1,500 but less than 15,000	Six times per year (Once per 60 days)	
Equal to or greater than 16,535 Equal to or greater than 15,000 12 times per year (Once per month)			

- a. Either the amount of bulk biosolids applied to the land or the amount of sewage sludge received by a person who prepares biosolids that is sold or given away in a bag or other container for application to the land (dry weight basis).
- b. Minimum monitoring frequency is 1/yr; 4/yr; 6/yr; 12/yr, as identified in table. Monitoring shall be conducted at routine intervals, i.e. quarterly, bi-monthly, monthly by facilities that generate biosolids routinely throughout the year.

2. **Soil** — The soil within the land application area of each field that receives biosolids shall be monitored by the permittee as specified below. Soil pH, available phosphorus and extractable potassium monitoring results shall be included in the monthly report.

		MONITORING REQUIREMENTS		
PARAMETERS (1)	LIMITATIONS (2)(3)	Frequency ⁽⁴⁾	Sample Type	
Soil pH (S.U.)	NL	prior to biosolids application***	Composite	
Available Phosphorus (Mehlich I - P)* (ppm)	NL	prior to biosolids application	Composite	
Extractable Potassium (Mehlich I – K)**(ppm)	NL	prior to biosolids application	Composite	
Extractable Calcium (mg/100 g)	NL	prior to biosolids application	Composite	
Extractable Magnesium (mg/100 g)	NL	prior to biosolids application	Composite	
Zinc (mg/kg)	NL	prior to biosolids application	Composite	
Manganese (mg/kg)	NA	prior to biosolids application	Composite	

NL = no limitations, monitoring required

- (1) Soil samples shall be collected and analyzed in accordance with regulations promulgated under § 10.1-104.2 of the Code of Virginia and as outlined in the Biosolids Management Plan (BSMP).
- (2) All parameters except for pH shall be monitored on a dry weight basis.
- (3) Results of the soil monitoring specified above shall be used to develop the NMP in accordance with Part III.D.2.
- (4) No sample analysis used to determine application rates shall be more than 3 years old at the time of the biosolids land application.

^{*} Available Phosphorus shall be analyzed using Mehlich I or Mehlich III analytical procedure. If sample is analyzed using Mehlich III, results shall be converted to Mehlich I for reporting purposes.

^{**} Extractable Potassium shall be analyzed using Mehlich I analytical procedure or equivalent. If sample is analyzed using an equivalent procedure, results shall be converted to Mehlich I for reporting purposes.

^{***} For biosolids with a cadmium concentration greater than or equal to 21 mg/kg the soil pH sample must be less than 1 year old.

B. BIOSOLIDS REPORTING REQUIREMENTS AND LAND APPLICATION FEES

1. Monthly Reporting – The permittee shall submit biosolids monitoring data and a monthly activity report to the Department of Environmental Quality (DEQ) Blue Ridge Regional Office and a copy of the report to the DEQ Office of Land Application by the 15th day of each month (as evidenced by the transmission date or postmark), for land application activities that occurred in the previous calendar month. If the report is submitted electronically, then the sender must include the attestation statement in Part III.B.1.d that the transmitted documents are being submitted under his/her signature.

If no land application occurs under this permit during a calendar month, a report shall be submitted stating that no land application occurred.

- a. Biosolids Monitoring Data
 - (1) The following data shall be submitted with the monthly report on the 15th day of the month after the samples were collected:
 - (a) Part III.A.1.b Biosolids Metals Limitations;
 - (b) Part III.A.1.c Biosolids Site Specific Metals Loading Limitations;
 - (c) Part III.A.1.f Biosolids Biosolids Characteristics.
 - (2) The following data shall be submitted with the monthly report on the 15th day of the month after the samples were land applied:
 - (a) Part III.A.1.g Biosolids Nutrient Concentrations, Application Rates, and Loadings; and
 - (b) Part III.A.2 Soil Soil pH, available phosphorus and extractable potassium.
 - (3) Monitoring data required by Part III.B.1.a(1)–(2) shall be submitted in the format provided in the Biosolids Monitoring Report. Supporting documentation, including laboratory chain of custody forms and certificates of analyses, shall be submitted with the report;
 - (4) Monthly average shall be reported as the average of the results of all samples collected within a calendar month and analyzed using an approved method, in accordance with Part II.A.1–2 of this permit. For monitoring periods which include multiple months, if one sample is collected during the monitoring period, that result shall be reported as the monthly average. If samples are collected in different months during the monitoring period, a monthly average shall be calculated for each month in which samples were collected during the monitoring period and the highest monthly average reported. Individual results and calculations shall be submitted with the report; and
 - (5) The maximum concentration shall be reported as the highest single result from all samples collected and analyzed during a monitoring period.
- b. Pathogen Reduction and Vector Attraction Reduction
 - The following data shall be submitted with the monthly report on the 15th day of the month for biosolids generated during the previous month:
 - (1) Part III.A.1.d Pathogen Reduction Requirements;
 - (2) Part III.A.1.e Vector Attraction Reduction Requirements;
 - (3) Supporting documentation, including laboratory chain of custody forms and certificates of analyses, shall be submitted with the data.
- c. Monthly Land Application Activity Report The following items shall be submitted in the format provided in the Biosolids Monitoring Report for all biosolids land applied during the previous month:
 - (1) Name of Permittee and VPDES permit number;
 - (2) Dates of activities;
 - (3) Identification of land application site(s), including the DEQ Control Identification for the site(s);
 - (4) The source of biosolids and field area (reported to the nearest 0.1 acres) receiving those biosolids;
 - (5) The amount of biosolids applied in dry tons and the method and calculations used to determine the reported value. Dry ton values for individual applications shall be reported to the nearest 0.01 dry tons. The grand total of all biosolids land applied during the reporting period shall be rounded up to the nearest whole ton;

B. BIOSOLIDS REPORTING REQUIREMENTS AND LAND APPLICATION FEES (continued)

- (6) The calculation of the total fee required in Part III.B.2;
- (7) A summary list of the total amount of biosolids applied and the calculated fee itemized by County where land application occurred;
- (8) The Certified Land Applicator(s) signed statement(s) as required per Part III.J.8.d;
- (9) The name of a responsible official or authorized representative of the permittee and a statement signed and dated by that responsible official or authorized representative indicating that the information submitted has been verified by that responsible official or authorized representative as correctly reported, in accordance with the Part II.K.
- d. Electronic Submittal Attestation Statement When submitting a report via email, the following statement shall be included in the email.
 - I, <u>representative official's or authorized representative's name</u>, hereby declare that I am submitting the attached documents under my signature for the purposes of compliance with the reporting requirements of VPDES Permit VA0062685. With the transmission of this email, I attest that the above statement is true and valid to the best of my knowledge.
- 2. Biosolids Land Application Fee The permittee shall remit to the DEQ a fee of \$7.50 per dry ton of Class B biosolids generated under this permit and land applied in the Commonwealth of Virginia. For Class B biosolids received from another generator and land applied under this permit, the permittee shall collect from the generator of biosolids and remit to the DEQ a fee of \$7.50 per dry ton of biosolids land applied in the Commonwealth of Virginia. Billing and payment procedures are as follows:
 - a. Upon reviewing the Monthly Land Application Activity Report in Part III.B.1.c, DEQ will bill the Permittee for the fee that is due. Payment is due 30 days after receipt of the bill from DEQ.
 - b. The permittee shall collect this fee from the facilities that generated the biosolids applied.
 - c. The check or money order shall be payable to the "Treasurer of Virginia" and mailed with the invoice to:

Department of Environmental Quality

Receipts Control

P.O. Box 1104

Richmond, VA 23218

Failure to submit payment by the due date may result in the permit being revoked or approved sources being reclassified as unapproved. This permit shall not be reissued, administratively continued or modified without full payment of any past due fee.

- 3. Annual Report The permittee shall submit an Annual Report not later than February 19th of each year to DEQ's Blue Ridge Regional Office. Each report is for the previous calendar year's activity. The report shall include at minimum:
 - a. A copy of DMRs submitted to EPA.
 - b. Part III.A.1.a Sewage Sludge Annual Production Monitoring
 - c. A summary of biosolids disposal contracts, if any, currently held with other generators, as well as any other biosolids or sludges currently being handled through subcontracts or other agreements. Include biosolids or sludges given to other generators, contractors or land filled, and biosolids or sludges accepted from other generators for treatment or land application. Attach a copy of any Notice and Necessary Information (NANI)'s received with biosolids accepted for land application, and NANI's you provided to contractors to whom you provided biosolids.
 - d. A summary of biosolids storage facilities including the capacity at each facility which is dedicated for a particular biosolids and the amount of remaining storage capacity;
 - e. A summary of any land application sites where the application was ongoing at the end of the reporting year, including the date of last application, including acreage completed and acreage remaining;
 - f. The total acreage of permitted land application sites available for use in the next calendar year; and

B. BIOSOLIDS REPORTING REQUIREMENTS AND LAND APPLICATION FEES (continued)

- g. Any biosolids monitoring data required by Part III.A.1 that were not submitted during the reporting calendar year.
- h. The annual report shall be certified and signed in accordance with Part II.K.

If no land application occurs under this permit during the reporting year, a report shall be submitted stating that no land application occurred.

C. BIOSOLIDS RECORD KEEPING REQUIREMENTS

- 1. Records Retention The permittee shall retain records of all biosolids and land application activity for a period of at least 5 years from the date of the sample, measurement, report or application. This period of retention may be extended by request of the Board at any time. Records to be retained include:
 - a. Monitoring information required in Part III.A;
 - b. Reports required in Part III.B;
 - c. Records required below in Part III.C.2 Part III.C.3;
 - d. Site Operator Notification and Information as required in Part III.E.6;
 - e. Certified Land Applicator Field Log as required in Part III.J.8.c; and
 - f. Any other information pertaining to biosolids and land application, including all calibration and maintenance records, as well as records of all data used to complete the application for this permit.

2. Class B/PC Biosolids Record Keeping – Records shall include:

- a. The following certification statement:
 - "I certify under, penalty of law, that the information that will be used to determine compliance with the Class B pathogen requirements in 9VAC25-31-710 B and the vector attraction reduction requirement in (insert one of the vector attraction reduction requirements in 9VAC25-31-720 B.1 through B.8, if one of those requirements is met) was prepared under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate this information. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment.";
- b. A description of how the management practices in 9VAC25-32-560 are met on each site on which bulk biosolids is applied;
- c. A description of how the site restrictions in 9VAC25-31-710 B.6 are met for each site on which bulk biosolids is applied;
- d. A description of how the VAR requirement is met if incorporation or injection are used to meet VAR;
- e. The date bulk biosolids is applied to each site; and
- f. The following certification statement:
 - "I certify, under penalty of law, that the information that will be used to determine compliance with the management practices in 9VAC25-32-560, the site restrictions in 9VAC25-31-710 B.6, and the VAR requirements in (insert either 9VAC25-31-720 B.9 or B.10, if one of those requirements is met) was prepared for each site on which bulk biosolids is applied under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate this information. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment."

C. BIOSOLIDS RECORD KEEPING REQUIREMENTS (continued)

- 3. Class B/CPLR Biosolids Record Keeping For sites where CPLR biosolids are land applied the permittee shall develop the following information and retain the information in subsections Part III.C.3.a through Part III.C.3.f indefinitely and retain the information in subsections Part III.C.3.g through Part III.C.3.m for 5 years.
 - a. The DEQ Control Identification of each site on which bulk biosolids is applied;
 - b. The number of acres in each site on which bulk biosolids is applied;
 - c. The date bulk biosolids are applied to each site;
 - d. The cumulative amount of each pollutant (i.e., kilograms) listed in Table 2 of 9VAC25-31-540 in the bulk biosolids applied to each site, including the amount in 9VAC25-31-530 E.2.c;
 - e. The amount of biosolids (i.e., dry tons) applied to each site;
 - f. The following certification statement:
 - "I certify, under penalty of law, that the information that will be used to determine compliance with the requirements to obtain information in 9VAC25-31-530 E.2.c was prepared for each site on which bulk biosolids is applied under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate this information. I am aware that there are significant penalties for false certification including fine and imprisonment."
 - g. A description of how the requirements to obtain information in 9VAC25-31-530 E.2.c are met;
 - h. The following certification statement:
 - "I certify, under penalty of law, that the information that will be used to determine compliance with the management practices in 9VAC25-31-530 B and 9VAC25-32-560 was prepared for each site on which bulk biosolids is applied under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate this information. I am aware that there are significant penalties for false certification including fine and imprisonment.";
 - i. A description of how the management practices in 9VAC25-32-560 are met for each site on which bulk biosolids is applied;
 - j. The following certification statement when the bulk biosolids meet the Class B pathogen requirements in 9VAC25-31-710 B:
 - "I certify, under penalty of law, that the information that will be used to determine compliance with the site restrictions in 9VAC25-31-710 B.6 was prepared under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate this information. I am aware that there are significant penalties for false certification including fines and imprisonment."
 - k. A description of how the site restrictions in 9VAC25-31-710 B.6 are met for each site on which Class B bulk biosolids is applied;
 - 1. The following certification statement when the VAR requirement in either 9VAC25-31-720 B.9 or B.10 is met:
 - "I certify, under penalty of law, that the information that will be used to determine compliance with the VAR requirement in (insert either 9VAC25-31-720.B.9 or B.10) was prepared under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate this information. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment."; and
 - m. If the VAR requirements in either 9VAC25-31-720 B.9 or B.10 are met, a description of how the requirements are met.

D. BIOSOLIDS MANAGEMENT PLAN (BSMP)

1. BSMP

- a. The permittee shall implement and maintain a BSMP which consists of the following components:
 - (1) The materials, including site booklets, developed and submitted at the time of permit application or permit modification to add a farm or land application site to the permit in accordance with 9VAC25-31-100 Q. This includes a list of other sources of biosolids that are received and land applied by the permittee;
 - (2) A NMP developed for each site prior to biosolids application;
 - (3) The Operations and Maintenance (O&M) Manual; and
 - (4) The Odor Control Plans.
- b. The BSMP and all of its components are an enforceable part of the permit.
- c. Any proposed changes in the biosolids/sewage sludge use or disposal practices or procedures followed by the permittee shall be documented and submitted for DEQ's Blue Ridge Regional Office approval 90 days prior to the effective date of the changes. Upon approval, the revised Biosolids Management Plan becomes an enforceable part of the permit. The permit may be modified or alternatively revoked and reissued to incorporate limitations or conditions necessitated by substantive changes in biosolids/sewage sludge use or disposal practices
- 2. NMP Requirement A NMP shall be developed for each land application site prior to biosolids application. A copy of the NMP shall be present at the land application site during land application operations and available for review by DEQ staff. A copy of the NMP shall be submitted to DEQ's Blue Ridge Regional Office upon request. Within 30 days after land application at the site has commenced, the permittee shall provide a copy of the NMP to the farm operator of the site, the Department of Conservation and Recreation (DCR) and the chief executive officer or designee for the local government where land application of biosolids is to occur, unless they request in writing not to receive the NMP.

The NMP shall be prepared or revised by a certified nutrient management planner as stipulated in 4VAC5-15-10 *et seq*. The NMP shall be written in accordance with the criteria stipulated in 4VAC5-15-10 *et seq*.

The NMP must be approved by DCR prior to land application for application sites where the soil test phosphorus levels exceed the values below in Table 1 of this section. For purposes of approval, permittees should submit the NMP to DCR at least 30 days prior to the anticipated date of land application to ensure adequate time for the approval process.

Table 1: Soil Phosphorus Levels Requiring NMP Approval				
SOIL TEST P (ppm)				
REGION (Mehlich I - VPI & SU Test)*				
Eastern Shore and Lower Coastal Plain 135				
Middle and Upper Coastal Plain and Piedmont 136				
Ridge and Valley 162				
*If results are from another laboratory, DCR approved conversion factors must be used.				

All NMPs shall account for all sources of nutrients to be applied to the site.

If the application rate has been determined using the phosphorus index and that rate is dependent upon setback distance to stream or riparian buffer width greater than the required setback distance in Part III.I.13.a, the phosphorus index calculations shall be included in the NMP. The extended setback distance required by the NMP shall be an enforceable part of the permit.

D. BIOSOLIDS MANAGEMENT PLAN (continued)

Where the following conditions exist, permit modification requests shall include an NMP that has been approved by the DCR and a copy of the approval letter:

- a. The proposed site is operated by an owner or lessee of a confined animal feeding operation or a confined poultry feeding operation, as defined in subsections A of §62.1-44.17:1 and 62.1-44.17:1:1 of the Code of Virginia;
- b. The land application of biosolids is to be performed more frequently than once every three years at greater than 50% of the annual agronomic rate;
- c. Mined or disturbed land sites where land application is proposed at greater than agronomic rates; or
- d. The site-specific conditions increase the risk that land application may adversely impact state waters.

When conditions at the land application site change so that it meets one or more of the specific conditions identified in Part III.D.2.a–2.d, an approved NMP shall be submitted prior to any subsequent land application at the site.

- 3. O&M Manual Requirement In addition to the O&M requirements of Part I.B.4, if an up-to-date O&M Manual is not on file at DEQ, an updated O&M Manual shall be submitted to DEQ within 90 days of the effective date of this permit. The permittee shall conduct all biosolids use or disposal activities in accordance with the O&M Manual. Any proposed changes in biosolids use or disposal practices or procedures followed by the permittee shall be documented and submitted to DEQ within 90 days of the effective date of the changes. The O&M Manual shall include at a minimum:
 - a. A copy of the permit;
 - b. Spill response, remediation and reporting procedures for offsite spills, including telephone numbers for immediate reporting to DEQ's Blue Ridge Regional Office;
 - c. Staff responsibilities on the land application site, including duties of the certified land applier in charge and procedures to be followed if he must leave the site;
 - d. Schedules, procedures, and recordkeeping instructions for equipment maintenance and calibration;
 - e. Voucher system forms and recordkeeping instructions;
 - f. Schedules, procedures, and recordkeeping instructions for storage facility maintenance;
 - g. Sampling schedules for:
 - (1) Required monitoring, including a list of required minimum tests; and
 - (2) Operational control testing;
 - h. Sample collection, preservation, and analysis procedures, including selection of sample locations, and laboratories and methods used; and
 - i. Instructions for recording and reporting of all monitoring activities;
 - j. Instructions for maintaining the Certified Land Applier's Operator Field Log and minimum information to record, including:
 - (1) Site location,
 - (2) Date, arrival and departure times,
 - (3) The names of any inspectors or visitors to the site;
 - (4) Complaints received; and
 - (5) Any unusual condition or event, such as unusual odor, spill, accident, etc.

D. BIOSOLIDS MANAGEMENT PLAN (continued)

- 4. Odor Control Plan (OCP) Requirement If an OCP is not on file at DEQ, an OCP shall be submitted to DEQ within 90 days of the modification/effective date of this permit. A copy of the OCP shall also be provided to all permitted land appliers to whom biosolids are provided. The OCP shall include at a minimum:
 - a. Methods used to minimize odor in producing biosolids;
 - b. Methods used to identify malodorous biosolids before delivery to the land applier (at the generating facility);
 - c. Methods used to identify and abate malodorous biosolids if delivered to the field, prior to land application;
 - d. Methods used to abate malodor from biosolids if land applied; and
- 5. Permittee Source List Addition of a Biosolids Source.
 - a. For a source that is identified as approved on the DEQ Sources List, but not identified in the Permittee's BSMP, at least 30 days prior to the staging, storage or land application of any such biosolids, the permittee shall submit to the DEQ–RO and CO:
 - (1) An amended Permittee Source List identifying all biosolids sources, including the generator's legal name and VPDES permit number, facility location and source of biosolids; and
 - (2) The biosolids generator's OCP, if not on file at DEQ.
 - b. For a source that is not approved on the DEQ Sources List, the permittee shall submit the following to the DEQ-CO, and the source shall be approved prior to the staging, storage or land application of any such biosolids:
 - (1) VPA Permit Application Form D-IV, Biosolids Characterization;
 - (2) VPA Permit Application Form D-V, Non-Hazardous Declaration, completed and signed by the generator;
 - (3) VPA Permit Application Form C, Industrial Sludge Characterization;
 - (4) Monitoring data or process control data as needed to demonstrate compliance with pathogen reduction and vector attraction reduction standards.
 - (5) The biosolids generator's OCP.
 - c. The amended Permittee Source List will become part of the BSMP.

E. NOTIFICATIONS

- 1. 100 Day Notification At least 100 days prior to commencing the first land application of biosolids at a permitted site, the permittee shall deliver or cause to be delivered written notification to the chief executive officer or designee for the local government where the site is located. This requirement may be satisfied by DEQ's notice to the local government at the time of receiving the permit application if all necessary information is included in the notice or by providing a list of available permitted sites in the locality at least 100 days prior to commencing the application at any site on the list. If the site is located in more than one county, the information shall be provided to all jurisdictions where the site is located.
- 2. 14 Day Notification At least 14 days prior to commencing land application of biosolids at a permitted site, the permittee shall deliver or cause to be delivered written notification to DEQ and the chief executive officer or designee for the local government where the site is located unless they request in writing not to receive the notice. The notice shall identify the location of the permitted site and the expected sources of the biosolids to be applied to the site.
- 3. Sign Posting At least five business days prior to delivery of biosolids for land application on any site permitted for application under this permit, the permittee shall post signs at the site that comply with this section, are visible and legible from the public right-of-way in both directions of travel, and conform to the specifications herein. The sign shall remain in place and be maintained by the permittee for at least five business days after land application has been completed at the site, and the permittee shall not remove the signs until at least 30 days after land application has been completed at the site.

The sign shall be posted at or near the intersection of the public right-of-way and the main site access road or driveway to the site used by the biosolids transport vehicles. In addition, if the field is located adjacent to a public right-of-way, at least one sign shall be posted along each public road frontage beside the field to which biosolids are to be land applied.

The sign shall be made of weather-resistant materials and shall be sturdily mounted so as to be capable of remaining in place and legible throughout the period that the sign is required at the site. Signs required by this section shall be temporary, nonilluminated, and four square feet or more in area, and only contain the following information:

- a. A statement that biosolids are being land-applied at the site;
- b. The name of the permittee;
- c. The telephone number of an individual designated by the permittee to respond to complaints and inquiries; and
- d. Contact information for DEQ, including a telephone number for complaints and inquiries.

From the time of posting until five business days after land application has been completed, the permittee shall make a good faith effort to replace or repair any sign that has been removed from a land application site or that has been damaged so as to render any of its required information illegible.

- 4. Notification of Sign Posting Not more than 24 hours after posting signs at the land application site as required in Part III.E.3, the permittee shall deliver or cause to be delivered written notification to DEQ's Blue Ridge Regional Office and the chief executive officer or designee for the local government where the site is located, unless they request in writing not to receive the notice. Notice shall include the following:
 - a. The name of the permittee, the name of a representative of the permittee knowledgeable about the permit and the telephone number of the permittee;
 - b. The location where the land application will take place, including the tax map number and the DEQ Control Identification for sites on which land application is to take place;

E. NOTIFICATIONS (continued)

- c. The name or title and telephone number of at least one individual designated by the permittee to respond to questions and complaints related to the land application project, if not the permittee identified in Part III.E.4.a;
- d. The approximate dates on which land application is to begin and end at the site; and
- e. The name, address and telephone number of the wastewater treatment facility, or facilities, from which the biosolids will originate, including the name or title of a representative of the treatment facility that is knowledgeable about the land application operation.
- 5. 24 Hour Notification Not more than 24 hours prior to commencing land application activities, including delivery of biosolids at a permitted site, the permittee shall notify in writing DEQ and the chief executive officer or designee for the local government where the site is located, unless they request in writing not to receive the notice. This notification shall include identification of the biosolids source and shall include only sites where land application activities will commence within 24 hours or where biosolids will be staged within 24 hours.
- 6. Site Operator Notification and Information The permittee shall provide to the operator of the land application site that receives biosolids notification and information as required by 9VAC25-32-313 I. The notification shall include at minimum:
 - a. A statement that biosolids land applied meet Class B pathogen reduction; and
 - (1) VAR requirements 1 through 8; or
 - (2) VAR requirements 9 or 10, requiring incorporation or injection;
 - b. A statement that metals concentrations in the biosolids applied to the site were below the pollution concentration or that they are CPLR biosolids and loading will be tracked;
 - c. When the biosolids molybdenum concentration is 40 mg/kg or higher, a notice which includes the molybdenum concentration and a statement that research suggests that a monthly average molybdenum concentration below 40 mg/kg may be appropriate to reduce the risk of copper deficiency in grazing animals; and
 - d. The list of site access restrictions required for Class B biosolids.

7. Handling of Complaints

- a. Within 24 hours of receiving notification of a complaint, the permit holder shall commence investigation of the complaint and shall determine whether the complaint is substantive. The permit holder shall confirm receipt of all substantive complaints by phone, email, or facsimile to the department, the chief executive officer or designee for the local government of the jurisdiction in which the complaint originates, and the owner of the treatment facility from which the biosolids originated within 24 hours after receiving the complaint.
- b. A substantive complaint shall be deemed to be any complaint alleging a violation of these regulations, state law, or local ordinance; a release of biosolids to state waters or to a public right-of-way or to any location not authorized in the permit; or failure to comply with the nutrient management plan for the land application site.

E. NOTFICATIONS (continued)

- 8. Notice and Necessary Information (NANI) If biosolids are provided to someone who land applies biosolids under a VPA Permit or a separate VPDES Permit, a NANI will be provided to that land applier. The NANI representing the most recent sampling event shall be given to the land applier no later than 45 days after the biosolids were delivered to the land applier. The NANI shall be on the form provided with this permit and include at minimum:
 - a. A statement that Class B pathogen requirements in 9VAC25-31-710 B were met and the alternative used;
 - b. A statement that one of the VAR requirements in 9VAC25-31-720 B.1 through B.8 was met and the alternative used; or
 - c. A statement that one of the VAR requirements in 9VAC25-31-720 B.1 through B.8 was not met and incorporation or injection was required;
 - d. The notice(s) provided to the land applier when biosolids provided did not meet VAR and required incorporation or injection;
 - e. The following certification statement:
 - "I certify, under penalty of law, that the information that will be used to determine compliance with the Class B pathogen requirements in 9VAC25-31-710 B and the VAR requirement in (insert one of the VAR requirements in 9VAC25-31-720 B.1 through B.8, if one of those requirements is met) was prepared under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate this information. I am aware that there are significant penalties for false certification, including the possibility of fine and imprisonment".

F. TRANSPORT

- 1. Transport routes should follow primary highways, shall avoid residential areas when possible, and shall comply with all Virginia Department of Transportation requirements and standards.
- 2. Transport vehicles shall be sufficiently sealed to prevent leakage and spillage of biosolids. For biosolids with a solids content of less than 15%, totally closed watertight transport vehicles with rigid tops shall be provided to prevent spillage unless adequate justification is provided to DEQ demonstrating that such controls are unnecessary prior to transport. DEQ may also require certain dewatered biosolids exceeding 15% solids content to be handled as liquid biosolids.
- 3. The permittee shall take appropriate steps to prevent drag-out and track-out of dirt and debris or biosolids from land application sites onto public roads. Where material is transported onto a paved or public road surface, the road surface shall be cleaned thoroughly as soon as practicable, but no later than the end of each day.
- 4. The permittee shall be responsible for the prompt cleanup and removal of biosolids spilled during transport. The operations manual shall include a plan for the prevention of spills during transport and for the cleanup and removal of spills. The permit holder shall ensure that its personnel, subcontractors or the drivers of vehicles transporting biosolids for land application shall be properly trained in procedures for spill removal and cleanup.
- 5. The permittee shall promptly report offsite spills to DEQ, the chief executive officer or designee for the local government jurisdiction in which the spill occurred and the owner of the facility generating the biosolids. The report shall be made verbally as soon as possible, but no later than 24 hours after the discovery of the spill. After business hours notification may be provided by voicemail, facsimile or email.

A written report, which shall include a description of measures taken in response to the spill, shall be submitted by the permittee to DEQ, the chief executive officer or designee for the local government and the owner of the facility generating the biosolids within five working days of the spill. The report may be sent by first class mail, facsimile or email, or it may be hand delivered.

G. STAGING

Biosolids may be staged in preparation for commencing land application or during an ongoing application. Biosolids shall be staged within the land application area of the permitted field or an adjacent permitted field. Staging is not considered storage and shall not take the place of storage.

- 1. Staging of biosolids shall not commence unless the field meets the requirements for land application in accordance with Part IX of 9VAC25-32 and field conditions are favorable for land application.
- 2. Biosolids may be staged for up to seven days, including the first day biosolids are offloaded onto the staging area, with the following exceptions. Biosolids shall be land applied by the end of the business day when offloaded at a permitted land application field:
 - a. In areas of Karst topography;
 - b. In areas identified in the U.S. Department of Agriculture Natural Resources Conservation Service (USDA-NRCS) soil survey as frequently flooded; or
 - c. On sites that have on-site storage.
- 3. If staged biosolids cannot be spread by the end of the seventh day of staging, the permittee shall take the following actions:
 - a. Biosolids shall be covered to prevent contact with precipitation;
 - b. The permittee shall notify DEQ in writing within 24-hours of determining that the biosolids will not be spread by the end of day 7, and no later than the close of business on Day 7. Notification shall include the biosolids source or sources and amounts, location of the site and reason for staging biosolids longer than seven days; and
 - c. Biosolids which have been staged for greater than seven days shall be spread or removed from the field as soon as field conditions that prohibit access to the field by loaders and spreaders no longer exist.
- 4. Staging shall be limited to the amount of biosolids specified in the NMP to be applied at the intended field.
- 5. Biosolids will be staged within the land application area of the field in which the biosolids will be applied or in a permitted field adjacent to the subject field, in a location selected to prevent runoff to waterways and drainage ditches.
- 6. Biosolids shall not be staged in the setback areas.
- 7. Biosolids shall not be staged overnight within 400 feet of an occupied dwelling unless the setback is reduced or waived with the written consent of the dwelling occupant and landowner.
- 8. Biosolids shall not be staged overnight within 200 feet of a property line unless the setback is reduced or waived with the written consent of the landowner.
- 9. Management practices, as described in the BSMP, shall be utilized as appropriate to prevent pollution of state waters by staged biosolids.
- 10. Staged biosolids are to be inspected by the certified land applier daily. After precipitation events of 0.1 inches or greater inspections shall ensure that runoff controls are in good working order. Observed excessive slumping, erosion, or movement of biosolids is to be corrected within 24 hours. Any ponding at the site is to be eliminated and any malodor shall be addressed in accordance with the OCP. The certified land applier shall maintain documentation of the inspections of staged biosolids.
- 11. Staged biosolids shall be managed so as to prevent adverse impacts to water quality or public health.

H. ON-SITE STORAGE

- 1. On-site Storage Biosolids may be stored for up to 45 days on a constructed surface at a location preapproved by DEQ at a land application site. These stored biosolids shall be applied only to sites under the operational control of the same owner or operator of the site where the on-site storage is located. Storage at the permitted treatment facility is not considered onsite storage.
- 2. Operational requirements for on-site storage include the following:
 - a. The certified land applier shall notify DEQ within the same working day whenever it is necessary to implement on-site storage. Notification shall include the source(s), location, and amount(s) of biosolids to be stored;
 - b. Storage shall be limited to the amount of biosolids specified in the NMP to be applied at sites under the operational control of the same owner or operator of the site where the on-site storage is located;
 - c. If malodors related to the stored biosolids are verified by DEQ at any occupied dwelling on surrounding property, the problem shall be corrected within 48 hours following DEQ's notification to the permittee, or the biosolids must be removed from the storage site;
 - d. All biosolids stored on the on-site storage pad shall be land applied by the 45th day, including the first day of on-site storage;
 - e. Best management practices shall be utilized as appropriate to prevent contact of the biosolids with storm water run on or runoff;
 - f. The certified land applier shall inspect the stored biosolids at least every seven days and after precipitation events of 0.1 inches or greater to ensure that runoff controls are in good working order. The certified land applier shall maintain documentation of inspections of stored biosolids;
 - g. Observed excessive slumping, erosion, or movement of biosolids is to be corrected within 24 hours. Any ponding or malodor at the storage site is to be eliminated and any malodor shall be addressed in accordance with the OCP. The certified land applier shall maintain documentation of the conditions observed and the corrective actions taken;
 - h. Storage of biosolids shall be managed so as to prevent adverse impacts to water quality public or health.
- 3. Construction requirements for on-site storage include the following:
 - a. Existing on-site storage shall comply with the requirements of this subsection by September 1, 2014;
 - b. An on-site storage "pad" shall be constructed within a site approved for land application;
 - c. On-site storage shall be located to provide minimum visibility of the biosolids from adjacent properties;
 - d. The surface shall be constructed with sufficient strength to support operational equipment and with a maximum permeability of 10⁻⁷ cm/sec;
 - e. In areas of Karst topography and environmentally sensitive sites, on-site storage may be prohibited or require additional restrictions.

I. FIELD OPERATIONS

1. Infrequent Application – If biosolids are applied to a field only once in a three-year period, biosolids may be applied such that the total crop needs for nitrogen is not exceeded during a one-year crop rotation period including the production and harvesting of two crops in succession within a consecutive 12-month growing season.

The NMP shall account for all sources of nutrients applied to the site, including existing residuals from prior nutrient applications.

An infrequent application at full agronomic rate will be restricted to provide no more than 10% of the CPLR for cadmium and lead in Part III.A.1.c per application.

- 2. Depth to Bedrock or Restrictive Layers Biosolids shall not be land applied where the depth from the ground surface to bedrock or restrictive layers is less than 18 inches.
- 3. Depth to Ground Water Biosolids application shall not be made during times when the seasonal high water table of the soil is within 18 inches of the ground surface. If USDA-NRCS soil survey information regarding depth of seasonal water table is not available, the water table depth shall be determined by soil characteristics or water table observations. If the soil survey or such evidence indicates that the seasonal water table can be less than 18 inches below the average ground surface, soil borings shall be conducted within seven days prior to land application operations during periods of high water table for the soil series present to verify the actual water table depth. The use of soil borings and water table depth verification may be required for such sites from November to May (during seasonal high water table elevations) of each year depending on soil type. Constructed channels (agricultural drainage ditches) may be utilized to remove surface water and lower the water table as necessary for crop production and site management.

4. pH Management

- a. Biosolids Cadmium > 21 mg/kg The pH of the biosolids and soil mixture shall be 6.0 or greater at the time of each biosolids application if the biosolids cadmium concentration is greater than or equal to 21 mg/kg. The soil pH must be properly tested and recorded prior to land application operations during which a pH change of one-half unit or more may occur within the zone of incorporation (i.e., use of biosolids containing lime or other alkaline additives at 10% or more of dry solid weight).
- b. Soil pH < 5.5 S.U. When soil test pH is less than 5.5 S.U. the land shall be supplemented with lime at the recommended agronomic rate prior to or during biosolids application if the biosolids to be land applied have not been alkaline stabilized.
- 5. Soil Potassium < 38 ppm When soil test potassium levels are less than 38 parts per million (Mehlich I analytical procedure or equivalent) the land shall be supplemented with potash at the recommended agronomic rate prior to or during biosolids application.
- 6. Equipment Calibration Application equipment shall be routinely calibrated as described in the BSMP.
- 7. Liquid biosolids Liquid biosolids shall not be applied at rates exceeding 14,000 gallons per acre, per application. Sufficient drying times shall be allowed between subsequent applications. Application vehicles shall be designed for use on agricultural land.
- 8. Grass Height Pasture and hay fields shall be grazed or clipped prior to land application, such that forage height is approximately six inches at the time of biosolids application.

I. FIELD OPERATIONS (continued)

- 9. Uniform Application Biosolids shall be applied such that uniform application is achieved. If application methods do not result in a uniform distribution of biosolids, additional operational methods shall be employed following application such as dragging with a pasture harrow, followed by clipping if required, to achieve a uniform distribution of the applied biosolids.
- 10. Odor Control by Incorporation Surface incorporation may be required on cropland by DEQ, or the local monitor with approval of DEQ, to mitigate malodors when incorporation is practicable and compatible with a soil conservation plan or contract meeting the standards and specifications of the USDA-NRCS.
- 11. Slope Restrictions Biosolids application timing and slope restrictions shall conform to criteria contained in regulations promulgated pursuant to § 10.1-104.2 of the Code of Virginia. Biosolids shall not be applied to site slopes exceeding 15%, except where a specific slope was identified in the BSMP and the slope has been approved by DEQ to receive biosolids.
- 12. Snow Covered Ground Biosolids may only be applied to snow-covered ground if the snow cover does not exceed one inch and the snow and biosolids are incorporated within 24 hours of application. If snow melts during biosolids application, incorporation is not necessary.

13. Setbacks

a. The land application of biosolids shall not occur within the following minimum setback distance requirements:

MINIMUM SETBACK DISTANCE	E REQUIREMENTS (1)
Adjacent Feature	Minimum Setback Distance (Feet) to Land Application Area
Occupied dwelling	200 (2), (3), (4)
Odor sensitive receptors	400 (4)
(without injection or same day incorporation)	
Odor sensitive receptors	200
(with injection or same day incorporation)	
Property lines	100 (3), (5)
Property lines of publicly accessible sites (6)	200
Water supply wells or springs	100
Public water supply reservoirs	400
All segments of streams and tributaries designated as a Public Water Supply under the Board's Water Quality Standards	100
Surface waters without a vegetated buffer	100
Surface waters with a 35-foot vegetated buffer	35
Agricultural drainage ditches	10
All improved roadways	10
Rock outcrops	25
Open sinkholes	100
Limestone rock outcrops and closed sinkholes (7)	50
(1) In access the manufacture of the second distance is invested the	

- (1) In cases where more than one setback distance is involved, the most restrictive distance governs.
- (2) The setback distance to occupied dwellings may be reduced or waived with the written consent of the occupant and landowner of the dwelling.
- (3) DEQ shall grant to any landowner or resident in the vicinity of a biosolids land application site an extended setback of up to 200 feet from their property line and up to 400 feet from their occupied dwelling upon request from their physician based on medical reasons. In order for an extended setback request to be

- granted, the request must be submitted to DEQ in writing on a form provided by DEQ. A request must be received by DEQ no later than 48 hours before land application commences on the field affected by the extended setback, and communicated by DEQ staff to the permittee no later than 24 hours before land application commences on the field affected by the extended setback. DEQ may extend a setback distance within 48 hours of land application if requested by the Virginia Department of Health in connection with the landowner or resident's physician.
- (4) Setback distances may be extended beyond 400 feet where an evaluation by the Virginia Department of Health determines that a setback in excess of 400 feet is necessary to prevent specific and immediate injury to the health of an individual.
- (5) The setback distance to property lines may be reduced or waived upon written consent of the landowner.
- (6) Publicly accessible sites are open to the general public and routinely accommodate pedestrians and include, but are not limited to, schools, churches, hospitals, parks, nature trails, businesses open to the public and sidewalks. Temporary structures, public roads or similar thoroughfares are not considered publicly accessible.
- (7) A closed sinkhole does not have an open conduit to groundwater. The setback from a closed sinkhole may be reduced or waived by DEQ upon evaluation by a professional soil scientist.
- b. Increased setback distances may be required based on site specific features, such as agricultural drainage features and site slopes.
- c. Waivers from adjacent property residents and landowners may only be used to reduce setback distances from occupied private residences and property lines. The setback from an odor sensitive receptor or a publicly accessible site may not be waived.
- d. Voluntary extensions of setback distances If a permittee negotiates a voluntary agreement with a landowner or resident to extend setback distances or add other more restrictive criteria than required by this regulation, the permittee shall document the agreement in writing and provide the agreement to DEQ's Blue Ridge Regional Office. Voluntary setback increases or other management criteria will not become an enforceable part of the land application permit unless the permittee modifies the BSMP to include the additional restriction.

14. Site Access Restrictions

Site Access Restrictions		
TIME RESTRICTIONS FOLLOWING COMPLETION OF BI	OSOLIDS APPLIC	CATION
ASSOCIATED WITH CLASS B PATHOGEN R	EDUCTION	
	Type of Application	
	Surface (1)	Injection or Incorporation (2)
Control of access to sites with high potential for public contact	12 months	12 months
Control of access to sites with low potential for public contact	30 days	30 days
Time lapse required before above ground food crops with harvested parts that touch the biosolids/soil mixture can be harvested	14 months	14 months
Time lapse before food crops with harvested parts below the land surface can be harvested	20 months	38 months
Harvesting food crops, feed crops and fiber crops	30 days	30 days
Harvesting feed crops for lactating dairy animals	60 days	60 days
Grazing by farm animals	30 days	30 days
Grazing by lactating dairy animals	60 days	60 days
Harvesting turf for placement on land with a high potential for		
public exposure or a lawn	12 months	12 months
 Remains on land surface for four months or longer prior to incorporation. Remains on land surface for less than four months prior to incorporation. 		

I. FIELD OPERATIONS (continued)

15. Forestland (Silviculture)

- a. The soil pH shall be managed at the natural soil pH for the types of trees growing in the area to which biosolids are to be applied;
- b. The soil test potassium level is not required to be at a minimum level at the time of biosolids application on silviculture sites;
- c. Biosolids application rates shall be in accordance with the BSMP, which shall include information provided by the Virginia Department of Forestry;
- d. High pressure spray shall not be utilized if public activity is occurring within 1,500 feet downwind of the application site;
- e. Biosolids application vehicles shall have adequate ground clearance to be suitable for silvicultural field use;
- f. Application scheduling included in the BSMP shall take into account rainfall and periods of freezing conditions; and
- g. Monitoring requirements shall be site specific and may include groundwater, surface water or soils, for frequent application sites.

16. CPLR Biosolids

- a. Before bulk biosolids subject to the CPLRs in Part III.A.1.c are applied to the land, the person who proposes to apply the bulk biosolids shall contact DEQ to determine whether bulk biosolids subject to the CPLRs in 9VAC25-32-356 [Table 3] have been applied to the site since July 20, 1993.
 - (1) If bulk biosolids subject to the CPLRs in 9VAC25-32-356 has not been applied to the site since July 20, 1993, the cumulative amount of each pollutant listed in Part I.A.2.c. may be applied to the site, in accordance with the limits in Part III.A.1.c.
 - (2) If bulk biosolids subject to the CPLRs in 9VAC25-32-356 has been applied to the site since July 20, 1993, and the cumulative amount of each pollutant applied to the site in the bulk biosolids since that date is known, the cumulative amount of each pollutant applied to the site shall be used to determine the additional amount of each pollutant that can be applied to the site in accordance with the limits in Part III.A.1.c.
 - (3) If bulk biosolids subject to the CPLRs in 9VAC25-31-356 has been applied to the site since July 20, 1993, and the cumulative amount of each pollutant applied to the site in the bulk biosolids since that date is not known, no additional biosolids containing the pollutants listed in Part III.A.1.c shall be applied to the site.
- b. Any person who proposes to apply bulk biosolids subject to the CPLRs in Part III.A.1.c to the land shall provide written notice, prior to the initial application of bulk biosolids to the land application site by the applier, to DEQ and DEQ shall retain the notice. The notice shall include:
 - (1) The location, by either street address or latitude and longitude, of the land application site; and
 - (2) The name, address, telephone number of the permittee applying the bulk biosolids, and VPDES permit number.

J. OTHER SPECIAL CONDITIONS

- 1. Biosolids Sources Only biosolids from sources approved by the DEQ and identified in the BSMP may be land applied.
- 2. Land Application Sites Biosolids shall be applied only at the sites identified in Attachment A.
- 3. The permit holder must have and maintain pollution liability and general liability coverage in the amount of \$2 million per occurrence with an annual aggregate of at least \$2 million, exclusive of legal defense costs. The permit holder or applicant may demonstrate the required liability coverage by using one of the mechanisms specified below:
 - a. A pollution liability policy as well as a general liability policy that covers all activities associated with the "Transport, Storage, and Land Application" of biosolids as specified in 9VAC25-32-790;
 - b. Passing a corporate financial test as specified in 9VAC25-32-800 or using the corporate guarantee for liability coverage as specified in 9VAC25-32-810;
 - c. Passing a local government financial test as specified in 9VAC25-32-820 or using the local government guarantee for liability coverage as specified in 9VAC25-32-830;
 - d. Obtaining a letter of credit for liability coverage as specified in 9VAC25-32-840; or
 - e. Obtaining a trust fund for liability coverage as specified in 9VAC25-32-850.
- 4. Alteration of Biosolids Composition No person shall alter the composition of biosolids at a site approved for land application of biosolids under a Virginia Pollutant Discharge Elimination System Permit. The addition of lime or deodorants to biosolids that have been treated to meet standards for land application as required by Part IX of the VPA Permit Regulation (9VAC25-32-303 *et seq.*) shall not constitute alteration of the composition of biosolids.
- 5. Site Specific Application Rates Site specific application rates shall not exceed the CPLR Limitations in Part III.A.1.c or the rates established in the NMP.
- 6. Landowner Consent
 - a. The Permittee shall maintain valid landowner consent forms for all sites identified in Attachment A of this permit that are not owned by the permittee and prevent improper concurrent use of the land application site. In order for a landowner consent form to be valid:
 - (1) It must be on Form D, Part D-VI Land Application Agreement Biosolids and Industrial Residuals;
 - (2) The agreement must be signed using the current approved form at the time the form is signed. (The landowner agreement is *Part VI* of the *VPA Permit Application*, *Form D*, *Municipal Effluent and Biosolids*); and
 - (3) The form must be complete, accurate and properly signed.
 - b. If upon the effective date of this permit any landowner agreement required by this permit is signed by the landowner on a form other than *VPDES Sewage Sludge Permit Application Form: Land Application Agreement Biosolids*, revision 9/14/2012, then within 60 days of the effective date, the permittee shall notify such landowner by certified letter of the requirement to sign and submit a new landowner agreement. The letter shall *instruct the landowner to sign and return the new landowner agreement, and shall advise the* landowner that the permittee's receipt of such new landowner agreement is required prior to any future application of biosolids to the landowner's property. Attached with the letter, the permittee shall include *VPDES Sewage Sludge Permit Application Form: Land Application Agreement Biosolids*, revision 9/14/2012, the instructions for completing the landowner agreement and a DEQ Fact Sheet.

After the effective date, no biosolids shall be land applied to land application sites for which a *VPDES Sewage Sludge Permit Application Form: Land Application Agreement – Biosolids*, revision 9/14/2012 has not been completed and signed.

J. OTHER SPECIAL CONDITIONS (continued)

- If the current Landowner Agreement(s) held between the Permittee and the landowner(s) was signed using *VPDES Sewage Sludge Permit Application Form: Land Application Agreement Biosolids*, revision 9/14/2012 prior to the effective date, such notice does not need to be sent to that landowner(s).
- c. New landowner agreements using the most current form provided by the Board shall be submitted to DEQ for proposed land application sites identified in each application for modification of this permit to add land application sites.
- d. In the event of change of landownership, the permittee is responsible for obtaining and maintaining valid landowner agreements prior to further land application. The updated landowner agreement must be submitted to DEQ prior to land application or on site at the time of land application.
- 7. Threatened and Endangered Species Protection No person shall apply bulk biosolids to the land if it is likely to adversely affect a threatened or endangered species listed in 4VAC15-20-130 and § 4 of the Endangered Species Act (16 USC § 1533) or if the land application is likely to adversely affect its designated critical habitat.
- 8. Certified Land Applicator Requirement
 - a. The permittee shall ensure that no biosolids land application activities occur unless a Certified Land Applicator (9VAC25-32-690 760) is onsite at all times during such land application. Certified Land Applicators may be considered to be onsite if they are at the site permitted for land application and, if it is necessary to leave the site, they are available within 30 minutes to return to the site to verify and ensure that land application of biosolids is in compliance with the permit.
 - b. Certified Land Applicators shall possess the site-specific permit information necessary to conduct land application on the site in accordance with the issued permit and make available at the land application site proper identification, including their certificate number issued by DEQ.
 - c. The Certified Land Applicator shall maintain an operator field log to document at minimum:
 - (1) site location;
 - (2) arrival and departure times;
 - (3) inspectors or any visitors to the site;
 - (4) complaints received; and
 - (5) any unusual condition or event at the application site.
 - The field log shall be available for inspection by DEQ.
 - d. The Certified Land Applicator(s) shall provide a signed statement(s) to be submitted with the monthly report in accordance with 9VAC25-32-690 A. The statement shall include:
 - (1) The name and certificate number of the Certified Land Applicators responsible for the application activity; and
- 9. The Board may modify or, alternatively, revoke and reissue this permit as appropriate and necessary to incorporate changes to any applicable standard or requirement for the use or disposal of biosolids, industrial wastewater sludge, or septage promulgated under Section 405(d) of the Clean Water Act, the State Water Control Law, 9VAC25-31-10, et seq. of the Virginia Pollution Discharge Elimination Permit Regulation, or 9VAC25-32-490, et seq. of the Virginia Pollutant Abatement Permit Regulation.

J. OTHER SPECIAL CONDITIONS (continued)

10. All pollutant management activities covered under this permit shall maintain no point source discharge of pollutants to surface waters except in the case of a storm event greater than the 25-year, 24-hour storm. The operation of the facilities of the owner permitted herein shall not contravene the Water Quality Standards, as adopted and amended by the Board, or any provision of the Water Control Law.

Any and all product, materials, industrial wastes, and/or other wastes resulting from the purchase, sale, mining, extraction, transport, preparation, and/or storage of raw or intermediate materials, final product, by-product or wastes, shall be handled, disposed of, and/or stored in such a manner so as not to permit a discharge of such product, materials, industrial wastes, and/or other wastes to State waters, except as expressly authorized.

LISTING OF LAND APPLICATION SITES

Field ID	DEQ Control ID	Gross Acres
KA-1A	51155-00001-0000	20
KA-1B	51155-00002-0000	30
KA-1C	51155-00003-0000	32
KA-1D	51155-00004-0000	22
KA-1E	51155-00005-0000	22
KA-1F	51155-00006-0000	22
KA-1G	51155-00007-0000	25
KA-1H	51155-00008-0000	30
SB-10	51155-00009-0000	12
SB-11	51155-00010-0000	17
SB-12	51155-00011-0000	17
DI-1A	51155-00012-0000	20
DI-1B	51155-00013-0000	20
DI-1C	51155-00014-0000	40
DI-2A	51155-00015-0000	17
DI-2B	51155-00016-0000	80
DI-2C	51155-00017-0000	78
DI-2D	51155-00018-0000	20
DI-4A	51155-00019-0000	20
DI-4B	51155-00020-0000	20
DI-5A	51155-00021-0000	40
DI-6	51155-00022-0000	40
DI-7A	51155-00023-0000	48
DI-7B	51155-00024-0000	48
DI-7C	51155-00025-0000	30
MF-1A	51155-00026-0000	7
MF-1B	51155-00027-0000	7
MF-1D	51155-00028-0000	7
MF-1E	51155-00029-0000	7
MF-1F	51155-00030-0000	7
MF-1G	51155-00031-0000	7
MF-1H	51155-00032-0000	7
MF-1I	51155-00033-0000	7
MF-1J	51155-00034-0000	7
MF-1K	51155-00035-0000	7
MF-1L	51155-00036-0000	7
MF-1M	51155-00037-0000	13
GG-1	51155-00038-0000	56
GG-2	51155-00039-0000	27
TD-1	51155-00040-0000	144
TD-2	51155-00041-0000	185
	Total Acreage	1272